A PROFILE OF CANADA'S RESIDENTIAL LAND DEVELOPMENT INDUSTRY

Appendix B

Previous Studies of the Residential Land Development Industry

pages 139 to 166

RESEARCH REPORT

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Appendix B: Previous Studies of the Residential Land Development Industry

This section summarizes the research that has been produced since World War II about the residential land development industry. As the postwar period began, the industry that exists today was in its infancy. By the late 1960s, land development had evolved to be an integral component of the flourishing housing industry, and several problems had attracted public attention to it, although it had not received significant study. Through the 1970s numerous studies attempted to understand the industry and propose solutions to the issues, simultaneously. For the next twenty years conditions changed in the land and housing markets, the regulatory environment around land development evolved, the land development industry adjusted, the interest in land issues abated and the studies stopped.

The Beginnings of Residential Land Development in Canada

While development of land has had an important role in Canada's history since the arrival of European settlers, the land development industry took on a decidedly new structure following World War II.

From the outset of European colonization, the planning and legal infrastructure for land development was established before settlement. Settlement proceeded deliberately, beginning with legal authorization by early governors and later legislatures, plans for the subdivision of land, and in most cases, the

formalization of these plans in surveys. By 1663 the settlement of New France was underpinned by seigneurial land grants in narrow strips along the St. Lawrence River and in the valleys and harbours of what is now the Atlantic Region.[121] When the great influx of Loyalists arrived in the Maritimes and Great Lakes/Ontario region during the late 1700s, the English system of land surveying had the land organized into townships, and subdivided into concessions and lots.[122] As Upper Canada filled and the wave of settlement began spreading across the prairies, the land was made ready by

> *"a great and uniform land survey in which each township was 6 miles by 6 miles and contained thirty-six sections, each section containing 640 acres and being a square mile in both size and shape".*[123]

In the late 19th and early 20th centuries the arrival of railroads opened up prairie cities for more settlement, and so many urban lots were subdivided on paper that land speculation flourished and "land booms" resulted across Western Canada.[124] In the wake of these booms there were enormous quantities of land shifted to municipal ownership through tax defaults, and many municipalities became active in the land business through the 1930s until as late as the 1950s, to rationalize the land holdings and sell them.[125] The planning and legal subdivision of land has played a central role in Canadian history.

The turn of the 20th Century saw several significant changes begin to emerge in land development. Historically, the predominant pattern of development was the rectangular grid. Grids were the original pattern of survey in rural areas, and as township lots became subdivided into farm parcels these usually became rectangular shapes as well. Similarly, townsites were laid out as smaller scale grids, from the earliest forts through the railroads' regimented prairie villages, and expanding industrial cities After World War I, a few large corporate land developers began creating a new kind of residential projects, with more thoughtful designs incorporating curvilinear streets linked to the topography, larger lots, parks and other forms of green space, and sometimes deed restrictions and zoning to control the type of residents and ongoing appearance.[126]

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[121] Kerr, D.G.G., editor. A Historical Atlas of Canada (Toronto:Thomas Nelson & Sons Canada Limited) 1961. p.25.
[122] Thompson, Don W., Men and Meridians, Volume I, (Ottawa:Queens Printer) 1966. p.220.
[123] Kerr. P. 62.
[124] Land booms occurred in Winnipeg (1881-83), Edmonton (1903-14), Regina (1903-13), Saskatoon (1910-12), Calgary (1010-12) and Vancouver (1905-11).
[125] See McCann, Larry. "A Regional Perspective on Canadian Suburbanization: Reflections on Richard Harris's Creeping Conformity", pp.32-45 in Urban History Review Vol. XXV, No. 1, pages 34, 37.
[126] McCann. op. cit., pages 36 and 41. Some examples include: linked subdivisions in Halifax (1922-Carrick and Company); Town of Mount Royal in Montréal (1910-CNoR); Hampstead in Montréal (1913-CPR and BMO officials); Leaside in Toronto (1912-CNoR); Town of Tuxedo in Winnipeg (1904-Frederick Huebach); Mount Royal in Calgary (1910-CPR); Shaughnessy Heights in Vancouver (1907-CPR); and Uplands in Victoria (1907-William Hicks Gardiner/Franco-Canadian Company).

Also after World War I, governments became more involved in the creation of residential subdivisions. As well as re-working the tax forfeited lands, some cities created housing projects to accommodate the demand for housing by returning soldiers.[127],[128] Town planning legislation was implemented by each of the western provinces, and municipalities began establishing zoning schemes. In the debris of the Halifax Explosion the federal government developed a small replacement community near Halifax's downtown, the Hydrostone project. During World War II Wartime Housing Limited was established, a federal Crown Corporation which planned and built over 50,000 housing units, including one quite extensive land development to house industrial workers at Ajax, Ontario. After that war there was such demand generated by veterans wanting to build or rent housing under the provisions of the Veterans Land Act and the Veterans Rental Housing Program[129] that many cities produced subdivisions that were tailored to support these programs.

In the early 1950s certain federal government projects modelled a new kind of residential land development. Subdivisions known as Permanent Married Quarters (PMQs) were created for military personnel and their families at bases all over Canada. These incorporated several housing types (singles, semis and row houses) in curvilinear layouts that usually integrated schools, churches and parks. Most importantly, they were pre-serviced with roads and sewers. Similarly, the 1950s saw the federal and provincial governments collaborating in public land assembly projects which rapidly spread across Canada, wherein the governments bought land and developed residential subdivisions, including fully-servicing the lots before they were sold. These government-led changes in the conventional manner of developing land were part of a larger initiative in public policy. In order to satisfy the burgeoning demand for housing, the federal government was systematically creating a Canadian housing industry, and improving all aspects of housing production.[130] As described by CMHC's chief advisor on planning at that time, Humphrey Carver:

> *"It was the task of CMHC to develop the Canadian housing industry, practically from scratch, to sow the seed and cultivate the crop."*[131]

In 1953 a Toronto land development that is considered highly influential came into being. Initiated by an industrialist, E.P. Taylor, and designed by a landscape architect and planner, Macklin Hancock, Don Mills was developed over the

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[127] This demand was supplemented by funding provided by the federal government's new Soldier Settlement plan.

[128] One prominent example is Lindenlea in Ottawa, developed in the early 1920s by Ottawa Housing Commission. See Pickett, Stanley. "Lindenlea, Ottawa", pp. 17-17 in Habitat, March-April 1961.

[129] Over 140,000 veterans sought grants or loans under the VLA program.

[130] The federal government's initiative to systematically create a Canadian housing industry is discussed in Marc Denhez, The Canadian Home. (Toronto: Dundurn Press), 1984. pp. 92-120.

[131] Carver, Humphrey. Compassionate Landscape. (Toronto: University of Toronto Press), 1975. pp107-108. The inadequacies of the building industry in the postwar era are also described in Carver's Houses for Canadians. (Toronto: University of Toronto Press), 1948, pp.63-65.

decade 1953-1963. This community was designed to realize five concepts: neighbourhoods; a discontinuous road system; a profusion of green space; new house forms on new lot configurations; and a separation of uses and activities. Neighbourhoods focused on elementary schools, which were a vital institution during the early years of the "baby boom". Instead of the traditional grid pattern, streets curved and looped to enclose the community. The layout protected green spaces to retain mature trees and skirt ravines. Rather than lining up houses in equal distance from the street, houses were sited with either their narrow or wide sides to the street. The community included a mixture of singles, semi-detached houses, row houses, and apartments.[132]

One of the qualities of Don Mills, the PMQs, and the government land assembly projects, marked the beginning of the modern era of residential land development.[133] This was the addition of physically servicing land to the tasks of planning, legally subdividing and surveying it, before selling developed sites to consumers. Homebuyers liked serviced lots because they were more convenient than buying unserviced lots and organizing with other owners and the municipality to retrofit the neighbourhood with roads, sewers, etc on a local improvements basis. Developers found fully-serviced subdivisions were a more complete, attractive product to sell. Municipalities were happy to require developers to produce serviced lots in lieu of the municipalities having to negotiate with neighbourhoods and individual owners in order to organize the construction of services, and to make all the associated financial and construction arrangements. Developer-serviced subdivisions quickly became the norm across Canada, with Québec being the only region that continued to separate land development (by developers) from land servicing (by municipalities). The examples of Don Mills and the various federal residential land projects lead to the widespread adoption of the package of modern qualities in land development - serviced lots, non-grid layouts, residential and land use mix, and neighbourhood designs.[134]

The 1970s – Discovering Problems, Starting Research and Responding with Programs

Through the 1950s and 1960s the housing industry surged, building twice as many units in the 1950s as in the 1940s, then growing by another one-third in 1960s (see Chart A-2). As the 1960s ended the prices of new houses were rising quickly and there was a perception that housing production was held back by problems in the urban land development process.

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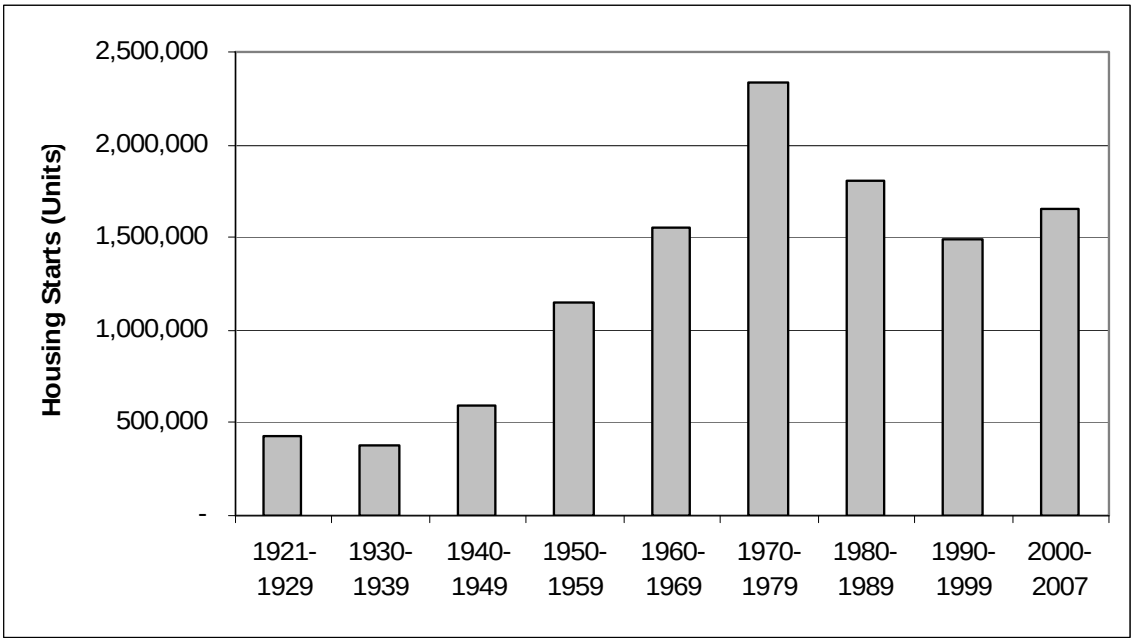
[132] This discussion of Don Mills was extracted from an article in the Autumn 1998 edition of The Heritage Post. See http://www.7thfloormedia.com/resources/canadiana/library/housing.html.

[133] Servicing adds a large expense to land development, which usually requires financing. Lenders require a comprehensive business plan as a condition of considering financing, and the combination of these demands lead to the evolution of a large, corporate, financially-sophisticated land development industry.

[134] The typical land development process of 1956 was described in CMHC's brief to the Royal Commission on Canada's Economic Prospects. See CMHC, Housing and Urban Growth in Canada. (Ottawa:CMHC) 1956. pp 25-29.

Chart B1: Housing Construction by Decade, Canada, 1921-2007



Source: CMHC. Canadian Housing Statistics, various years

The federal government undertook a national study in 1968 known as the Task Force on Housing and Urban Development, lead by a Minister and former house builder, Paul Hellyer. In early 1969 the Task Force reported that land costs were a critical cause of house prices, and

> *"…the very system whereby land is assembled and serviced in this country creates an even more basic problem."*[135]

The report observed the difficulty in assembling parcels of land of sufficient size to provide economies of scale in the development process, the tendency of municipalities to require developers to service land to "gold-plated" or "Cadillac" standards, and the need for a "grand design" that brings together land, trunk services, zoning and subdivision requirements to create better communities at more reasonable costs.[136] It discussed the socially-created increment in land value and debated whether society or the land owner should be able to obtain this increment. It described the municipal program in Saskatoon which held 5,000 acres in a 20-year "land bank", and

> *"…provided land for private development at reasonable prices while at the same time planning the development pattern in a comprehensive sense and retaining, again on a*

[135] Canada. Task Force on Housing and Urban Development. (Ottawa: Queen's Printer), 1969, p.38.
[136] Task Force, op. cit., pp.40-46.

> *planned basis, sufficient land at the proper sites for public uses such as schools, libraries, parks and the like."*[137]

For the next decade a succession of studies elaborated these themes and explored other aspects of land development and urban development.

Key Recommendations for Land Development in the Hellyer Report

- Provinces should establish a system of regional governments, equipped with adequate powers, so urban planning can be done effectively;
- governments should review requirements for registering, servicing and zoning land with a view to simplifying procedures and providing greater flexibility so the market can serve all income groups;
- urban renewal should be re-oriented to limit the destruction of older housing, and to encourage a more precise and effective scale of redevelopment;
- municipalities should assess and tax land to encourage its use to its maximum planning potential;
- all profits from land sales should be treated as taxable income;
- local governments should should acquire, service and sell all or a substantial portion of the land required for urban growth;
- the federal government should make loans to local governments for land assembly and development.

Note: At that time the taxation system treated the profits from land sales as "capital gains" and only 50 per cent was taxed at the normal, business rate

In 1970 Carleton University economist N. H. Lithwick, commissioned by Canada's first federal Minister soley responsible for housing, delivered a wide-ranging examination of urban systems. The Lithwick report, with six accompanying research monographs,[138] included mini-studies of land development and urban growth in 13 urban regions from coast to coast.[139] These brief studies considered each region's land supply for the short and longer term, growth patterns, and land ownership including land in public ownership.

Professor Lithwick advocated a national urban policy which included creating "new communities" on the periphery of metropolitan areas, linked to their core cities by efficient transportation systems.

As the Lithwick report was being finalized, the Federal Government set up the Ministry of State for Urban Affairs to coordinate federal urban activities and policies, in cooperation with the provinces.[140] It recognized that the federal government has huge impacts on cities, including the fact that it was Canada's largest landowner, and that program activities like the TransCanada Highway, the Railway Relocation Act, the Grade Separation Fund and CMHC's housing

[137] Task Force, op. cit., p.40.
[138] Lthwick, N. Harvey. Urban Canada: Problems and Prospects. (Ottawa:CMHC), 1971. Main report and six other monographs.
[139] The following urban regions were discussed in Lithwick's Research Monograph 5 – The Urban Future: Vancouver, Edmonton, Calgary, Regina, Winnipeg, Windsor, London, Hamilton, Toronto, Ottawa-Hull, Montréal, Québec and Halifax.
[140] This initiative was announced in the Speech from the Throne, October 1970.

and development programs were key factors in freeing up strategic land for redevelopment and for transportation corridors, and in rebuilding cities.

Key Findings Concerning Land Development in the Lithwick Report

- In an economy where the price (of land) is based largely on demand, and where there is scarcity, it is doubtful whether minor savings (such as reducing carrying costs by accelerating the processing of subdivision plans) would be passed along to consumers.
- The method of financing the capital works needed to support land development may cause problems. If strained municipal budgets must bear these costs, Councils may delay bringing sewer, water and power to new areas, and this has the effect of aggravating the shortage of land available for building.
- Growth designations and the provision of trunk sewers sometimes have the effect of creating near-monopoly situations in the regional land supply.
- Lot prices were lower in Québec, where land holdings were often small and urban regions were fractured into many municipalities.
- Urban land use and transportation are closely linked, and improvements to urban transport can increase the effective land supply for development.
- Provincial agencies and municipalities were attempting to improve the land supply by banking and developing land, and selling lots at or near market prices. The City of Regina is controlling land prices by marketing 25 per cent of lots for building.

Coinciding with the Lithwick research, two major studies were commissioned by CMHC. A task force headed by Michael Dennis and Susan Fish probed the production of low income housing, while Professor/Architect Glen Milne examined urban assistance and urban renewal activities. The Dennis Report[141] included partial listings of the larger land developers and their land holdings around major cities, and concluded that there was significant concentration in the urban residential land supply that contributed to the rapidly rising land prices. Both the Dennis and Milne studies advocated an increased role for public land assembly and development to aid urban planning, provide lower-cost land to assist other housing programs and improve housing affordability, and to improve the land supply and development process.

The Dennis/Fish Task Force, in conjunction with the national organization of home builders (now CHBA), produced an estimate of the size of the land development industry. A questionnaire was sent to the entire HUDAC membership and replies were received and analyzed from 350 firms. Table B1 uses findings from this sample to estimate that in 1971 the land development industry, nationally, comprised about 1,450 firms.

This is clearly a low estimate, as it is based on the assumptions that there were only 2,450 builder and developers, and that most developers were also home builders. The indication that the industry entailed fairly equal numbers of firms associated with small, medium and large amounts of housing is more robust, as it is a finding which emerges directly from the survey, without projections.

[141] Dennis, Michael and Susan Fish. Programs in Search of a Policy. (Toronto: Hakkert Press), 1972.

Table B1: Estimation of the Size and Structure of the Residential Land Development Industry, 1971

Industry Structure	Home Building Industry (assumes there are 2,450 home building firms in Canada)		Estimates of the Land Development Industry	
	Col. A	Col. B	Col. C	Col. D
	% of all firms (as found in the survey)	Calculated Number of Builders & Developers (2,450 multiplied by Col. A)	% of Builders & Developers that Develop Land (as found in the survey)	Calculated Number of Developers (Col. B * Col. C)
Small Firms (1-25 units per annum)	47%	1,151	38%	437
Medium Firms (26-100 units per annum)	27%	661	67%	443
Large Firms (Over 100 units per annum)	26%	637	88%	561
Totals	100%	2,449		1,441

Source: Derived from Roberts, C.J. B., A Survey of the Canadian Housebuilding Industry. Background study for the Task Force on Low Income Housing. CMHC unpublished draft. 1971. pp.iv. and 13-15.

In 1973 the National Housing Act was amended to implement many of the recommendations of these various studies. It included measures to increase the land supply such as limited forms of urban redevelopment (Neighbourhood Improvement Program) and stand-alone new communities on the urban fringe. Many of the 1973 measures reinforced regional planning, such requiring that a project had to be part of a recognized regional plan in order to be eligibile for financing under the Municipal Infrastructure Program, the Land Assembly Program, the Neighbourhood Improvement Program or the New Communities Program.The measures also included funding for the preservation of the existing housing stock (Residential Rehabilitation Assistance Program); and for builders and buyers of more basic houses at affordable prices (The Affordable Home Ownership Program - AHOP).

The federally-funded residential land assembly program had begun in the early 1950s, grew during the 1960s and then expanded strongly in the 1970s. Government land banking and development activities were seen as a means to simultaneously increase the supply of land, provide for affordable housing, improve urban planning and address any concentration in the land supply. By the mid-1970s, the federally-financed program had purchased over 33,000 acres of land and developed over 14,000 lots in over 150 projects in all provinces and almost every city, and had an annual budget of about $100 Million.[142]

The government land projects entailed considerable controversy, and several researchers studied various aspects of this activity. Donald Ravis examined the origins of Saskatoon's "land banking" program and how it was used in concert with the replot provisions of the Saskatchewan Community Planning Act to produce comprehensively-designed residential neighbourhoods, focused on

[142] Spurr, Peter. Land and Urban Development. (Toronto: James Lorimer and Company) 1976. pp. 275-295.

school sites, with suitable mixes of commercial and industrial facilities.[143] Like Ravis's research, a study by the Bureau of Municipal Research from Toronto described Saskatoon's land activities as being highly beneficial to urban growth planning.[144] This benefit was also found by another analyst, UBC Professor Stan Hamilton, and both Hamilton and Ravis found that the Saskatoon land bank was selling lots to the private house construction industry at prices that were keeping housing prices moderate, yet making a profit for the city.[145] This public land development operation was producing about two-thirds of all lots for new housing in Saskatoon. A study of Red Deer, in which the municipality was developing almost all new lots in the urban region, had similar findings about the purposes, sales practices and effects.[146] Other reports and submissions cautioned governments about real or apprehended problems in public land banking and land development, and recommended that these programs be discontinued.[147]

The first research-oriented, national examination of land development came into circulation in 1974.[148] Known as the Spurr Report, it contained data about 60 of Canada's largest private land developers with activities in 24 metropolitan regions, as well as virtually all land assembly and development activities of the various governments. It looked at the assets, organizational structure and profitability of both private and public developers, and explored market structure and competition in the land development industry. Also, it contained case studies of land markets in many of the major urban regions. Its conclusions refined and sometimes differed from directions seen in the previous studies.

In 1975, the Federal Housing Action Program instituted further measures to increase the land supply. It broadened federal assistance for sewer and water projects, and provided $1000 grants to municipalities for every medium density, modestly priced housing unit started within their jurisdiction. The federal land assembly program was expanded to second generation urban developments, and it made loans directly to municipalities for innovative projects like St. Lawrence in Toronto, and False Creek (and Granville Island) in Vancouver. A land market intelligence unit was begun in all major CMHC branch offices.

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[143] Ravis, Donald. Advance Land Acquisition by Local Government: The Saskatoon Experience. (Saskatoon: Community Planning Association of Canada), 1973.
[144] Bureau of Municipal Research. Land Banking: Investment in the Future. (Toronto: Civic Affairs Bulletin No. 1), 1973. p. 26.
[145] Ravis, op.cit., p.86 and Stanley W. Hamilton, Municipal Land Banks: A Case Study of Saskatoon, Mimeographed manuscript. (Vancouver: University of British Columbia Faculty of Commerce and Business Administration), 1971. pp. 19-22.
[146] Watson, Kenneth F., Landbanking in Red Deer. (Vancouver: Thesis, University of British Columbia School of Community and Regional Planning), 1974.
[147] Examples include: S.W. Hamilton, Public Land Banking: Real or Illusionary Benefits, (Vancouver: UBC Faculty of Commerce and Business Administration), 1974; Fraser Institute, Real Property: The Habitat Debate Continued, (Vancouver: the Institute), 1976.
[148] This research was originally provided to CMHC in 1974 under the title "The Land Problems Problem", and was later published, privately, as "Land and Urban Development". See Spurr, Peter, op. cit. .

Key Findings Concerning Land Development in the Spurr Report

- The price of land is a derivative of the price of new housing, and the later is determined by trading in the whole market for housing, which is dominated by sales in the existing stock. So small changes to the supply of land, or the cost of developing land, won't affect the price of housing, but they do raise developers' costs and may affect land values in the longer term.
- Land markets in most metropolitan areas were becoming concentrated. The concentration was the logical outcome of regional planning channeling growth to locales where expensive public investments in sewer, water, roads and other services were being provided, and well-capitalized investors acquired much of the land. In effect regional growth planning channels the social increment of land value to these well-capitalized land owners.
- The development of lots for new housing was becoming dominated by a few large developers (some private firms, some public land assemblies). It was estimated that 120-140 larger developers account for 75 per cent of metropolitan lot production. It found 47 firms held 119,000 acres of land in 21 regions and 16 of these firms had plans for housing at least 1,000,000 people within a generation. In addition, over 50,000 acres was being held in about 100 public land assembly (or public land banking) projects.
- There did not appear to be a shortage in the urban land supply in most centers as lot production was rising, lot surpluses were frequent, and the major developers held large stocks of future land supply. From the viewpoint of home buyers, builders and small developers, the "land shortage" referred to their desire to obtain non-existent, low-priced lots and acreage.
- 159 public land assembly projects were financed under the National Housing Act between 1950 and 1972, of which 133 sold or leased lots at or near market prices, and 11 sold or leased at a sub-market, cost-based price.
- The report advocated expansion of public land assembly activities in future growth areas to allow for comprehensive planning, and employing private firms for the planning, development and marketing of this land. This would use the skills of entrepreneurs for efficiency in the process, while capturing the social increment in land value for the society at large. It also recommended that an investigative unit be established to monitor urban land markets and development activities in all metropolitan regions.

Also in 1975, the Ontario government introduced a Land Speculation Tax, aimed at reducing the escalation of land and housing prices and recovering for the public a major share of windfall gains from land speculation. It excluded sales of principal residences, vacation property, developed industrial or commercial property, farms owned for at least ten years, and residential investment property owned for at least ten years and containing a structure worth at least forty per cent of its total value. Originally set at 50 percent, it was widely criticized, reduced to 20 percent and gave rise to many legal actions by land developers. Very little revenue was ever collected by the tax, and it was repealed in October of 1978.[149]

In 1976 HUDAC released a study of nationwide land development costs.[150] It examined development costs in 1974 in eleven urban regions, and divided them into fixed cost components (servicing costs, municipal levies, consultants fees and developers overhead) and market-variable components (land costs, carrying

[149] Summary based on Smith, Lawrence B., "The Ontario Land Speculation Tax: An Analysis of an Unearned Increment Land Tax", pp. 1-12 in Land Economics, Vol.52, 1976

[150] Derkowski, Andrzej. Costs in the Land Development Process. (Toronto: HUDAC), April 1976.

charges and profit). This multi-market data revealed that fixed cost components did not vary between urban regions as much as the price-variable components.

Key Findings Concerning Land Development in the HUDAC (Derkowski) Report
• lot prices are correlated with the degree of complexity in development control system; • rapid price increases occurred where the land supply was truncated; • approval processes should be streamlined, development standards should be reduced, and government land development projects should be eliminated; • The increasing difficulties and costs of development which are part of the cause of scarcities of lots, are also the main cause of increasing concentration in the land development industry throughout Canada.

In 1977 the Report of the Winnipeg Land Prices Inquiry Commission (the Bellan report) considered the complex land supply situation in that urban region. For many years four private land developers (BACM/Genstar, Ladco, Qualico, and Metropolitan Homes), and the land development arm of the Manitoba Housing and Renewal Corporation (MHRC), owned most of the land and produced most of the serviced lots.[151] The report found this concentration was impacting lot prices and capturing the social increment in land value, and recommended a managed approach wherein a City Commissioner of Land Development would monitor all aspects of the land supply, and ensure that the City's invests in services to maintain a contiguous expansion of the city in the various sectors. MHRC would be tasked with producing 20 per cent of all newly serviced lots in Winnipeg each year.The City would require a "Capital Installations and Extensions Charge" from landowners for their pro-rata share of the total outlay on capital installations and extensions made necessary by the City's outward spread, and a "Connection Charge" would be calculated to recapture any gains from land sales that the Commissioner found to exceed "fair and reasonable returns".[152]

In 1977 CMHC's new land supply monitoring system, the Land and Infrastructure Mapping Program published its first reports. The program monitored and assessed the major elements of the land supply and made the information available to government and other interested parties. Table B2 summarizes the main outputs of the mapping program's analysis in 1977. In the 17 metropolitan regions it monitored, the supply of land was greater than the estimated demand everywhere (except for the current (one-year) supply in Victoria and Vancouver). The current land supply exceeded demand in 6 regions and was more than double the estimated demand in 9 regions. The supply which was considered

[151] These "Big Four" developers together owned 10,200 acres, the City of Winnipeg owned 2,000 acres, and most of these holdings were close to the built-up area and developable within ten years. MHRC held 3,200 acres and 47 companies owned by 31 "speculators" held 2,600 acres, but these holdings had a longer development horizon. See Bellan, Ruben C.,Report and Recommendations of the Winnipeg Land Prices Inquiry Commission, (Winnipeg: Province of Manitoba, July 1977), Table IV.

[152] Report of the Winnipeg Land Prices Inquiry Commission, (Winnipeg: the Commission, 1977).

developable within five years exceeded demand in 13 of the 17 regions. In Vancouver there was more land considered to be developable within five years than the estimated demand for that period, and in Victoria the five-year supply was more than twice the level of demand.

Table B2: Strength of the Urban Land Supply, Major Cities - 1977

Land Supply Less than Estimated Demand		Land Supply Exceeds Estimated Demand			
		Less Than/Equal to Double		More Than Double	
One Year Supply*	**1-5 Year Supply**	**One Year Supply***	**1-5 Year Supply**	**One Year Supply***	**1-5 Year Supply**
Victoria, Vancouver		Calgary, Edmonton, Winnipeg, Windsor, St. Catharines, Halifax	Vancouver, Calgary, Saskatoon, Windsor,	Saskatoon, Thunder Bay, Sudbury, London, Kitchener, Hamilton, Toronto, Ottawa, Montreal	Victoria, Edmonton, Winnipeg, Thunder Bay, Sudbury, London, Kitchner, St. Catharines, Hamilton, Toronto, Ottawa, Montreal, Halifax

* Note: The one-year land supply is the aggregation of parcels and parts of parcels which possess the following characteristics - approved subdivision plan, sewer and water on site, no drainage problem. Parcels, or parts of parcels, are assigned to future time periods in accordance with the degree to which they lack each of these attributes.

Source: All data from CMHC, Land and Infrastructure Mapping Program, 1977

The mapping program allowed CMHC, and provincial and municipal authorities to assess the overall land supply or individual parts of it, and this allowed for more accurate management of urban growth. In 1978 the program expanded to 28 urban regions and it continued at this level through 1982.

In 1978 a study for the Ontario Economic Council examined the industrial organization of the market for new housing in the general area of metropolitan Toronto. This study, by McMaster economist R. Andrew Muller, remains the most thorough consideration of economic theory applied to land markets in the Canadian literature.[153] Focusing on the Toronto region, it examined local markets, the local industry and many characteristics of individual major land development and house building firms, as well as the economic theory surrounding concentration and the conditions for the exercise of market power[154]. Among its findings, it observed that sub-markets within an urban region are

[153] Muller, Andrew. The Market for New Housing in Metropolitan Toronto. (Toronto: Ontario Economic Council), 1977.
[154] Muller, Op.Cit., pp. 42-50

appropriate definitions of markets, and control of land in various stages of development is more significant than mere ownership of raw land in suburban areas.

In September 1978, the Federal/Provincial Task Force on the Supply and Price of Serviced Residential Land issued a large two-volume report accompanied by a set of 18 background papers.[155] This was the outcome of a major inquiry into the land supply launched by the federal and provincial ministers of housing in October 1976. Lead by a Toronto lawyer, David B. Greenspan, it employed several dozen academics and representatives of the industry, and was tasked with examining the main elements of the land supply and the issues which had arisen concerning prices and land policy.

Key Findings Concerning Land Development in the Greenspan Report

- Lot prices had increased in the 1970s because in the face of a great surge in demand the owners of the housing stock revalued their assets and the prices of the relatively few new houses followed, which therefore increased the price of lots for new houses (with a comparatively larger increase, due to a leverage effect).
- No improvements in supply-side factors like reducing servicing costs of lots, or lowering taxes, levies and imposts, or speeding up slow approval processes, or making government land assemblies sell more lots at low prices, could prevent the increases in existing house prices. However, supply-side factors impacting land development can influence prices over the long term.
- While governments must plan and control urban growth for overall economic and environmental reasons, they must balance this with assuring adequate production of space for expansion.
- As local governments may resist lower cost housing to maintain a high tax base and protect the property values of their residents, senior governments should offset this by compensating municipalities for lower-cost housing.
- When housing is not booming and demand isn't pulling up housing prices, hard servicing costs are the main factor in changing lot prices.
- It is not certain how lot levies (development cost charges, imposts) affect prices in the long term. Most likely they are passed around in a complex way: a portion is passed back to farmers in lower prices for raw land; a portion is passed forward to house buyers in higher prices for lots.

The Task Force studied concentration in the land supply, seeking to determine whether the supply was concentrated, and if it was, whether concentrated owners could exercise market power (ie.: affect prices). It looked at ownership structure in some land development firms, at financial data from some developers, and at overall suburban land ownership. It theorized that if the four largest owners held 50-70 percent of the land within a metropolitan region that is potentially-serviceable within in five years, this would be a sufficient condition for the exercise of market power.

After examining land ownership in thirteen 13 metropolitan areas and finding that four met the concentration criteria, the Task Force noted that each of the four included one large public land owner and concluded that

[155] Greenspan, David B. Down to Earth – Report of the Federal/Provincial Task Force on the Supply and Price of Serviced Residential Land. (Ottawa: CMHC), April 1978.

> *"We have found no evidence that monopoly power exists in either the land ownership or the land development industries".*[156]

This conclusion was not actually supported by the Task Force's Report. The Task Force had not produced an adequate theory for assessing market power nor had it accurately described the land markets of the 1970s. In order for the present review to accurately describe the land development situation in the 1970s, both of these shortcomings must be recognized.

There are at least three inadequacies in the theory behind the Task Force's test for "market power", and there was a large weakness in the Task Force's empirical methodology. According to industrial organization theory, market power is exercised when land sellers extract excessive prices from buyers because the buyers cannot find alternative sellers. In residential land development, this requires that new home buyers must be convinced to pay the excessive price for their lots because they cannot find substitutes.

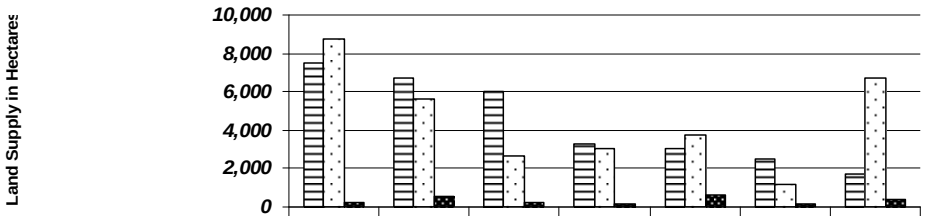
1) The Task Force assumes there is one regional land supply, and tests for concentration in the ownership of land it considers serviceable within five years. This regional approach ignores sub-markets, both geographical and sub-markets for housing of various types, even though the Ontario Economic Council's work in 1977 had just described in detail how market power could be exercised within submarkets. An un-concentrated regional market could contain sub-markets in which market power was being exercised.
2) The Task Force's theory concerning temporal aspects of land supply only establishes that market power would exist under narrowly-defined, implausible circumstances. It posits that 4-5 owners holding 50-70 percent of the regional supply of 5-year serviceable land have market power. What if the other 30-50 per cent of the supply, which is held by non-concentrated owners, is the currently developable land? The non-concentrated owners could be the only sellers interacting with consumers for several years, and the concentrated owners would only be in a position to exercise power in the supply of replacement sites. But if the next influx of serviceable land (the land serviceable in years six and seven) was also in widespread ownership, it could be a long time before the concentrated owners ever got a chance to interact with buyers at all, much less to interact from a position of power. If the ownership of the close-in supply is concentrated, the competitiveness of the future supply, three-five years away, might be immaterial. The Task Force's temporal conditions for market power are not sufficient.
3) The Task Force's consideration of land supply without reference to demand is simplistic. What if annual demand, quantitatively, only amounts to 5-10% of the amount of land considered serviceable within five years?[157] If non-concentrated owners possess the near-term portion of that supply, buyers could interact with non-concentrated owners for between four and ten years before they ever have to deal with the concentrated owners.

The Task Force's empirical work in identifying land serviceable within five years, differed significantly from CMHC land mapping analysis, as seen in Chart A-3. The Task Force used the land mapping information, but added land in some cases, and deleted in others, to produce their own estimates of the quantity of land capable of being serviced within five years. This chart compares the Task

[156] Greenspan Report, Finding 28, p. 72.
[157] It is notable that this condition (annual demand under 10% of the five-year supply) existed in 13 of the 17 metropolitan regions studied in 1977.

Force's estimates with CMHC land mapping of parcels that already had a sewer on site or planned. In most cases the Task Force added parcels to the mapping program lands and the result was estimates of land serviceable within five years that exceed the estimated demand (12-20 demand/years of supply). In Hamilton, Vancouver and Ottawa the Task Force reported less land than the mapping program, even though the parcels they excluded either had sewers on site or planned. These odd empirical judgements compromised the data base so it was not really suitable for calculating concentration in land ownership.

Chart B2: Comparison of the Five-Year Land Supply in Two Data Bases (1977 Data)



	Ottawa	Calgary	Winnipeg	Halifax	Vancouver	Saskatoon	Hamilton
Supply - F/P Task Force	7,515	6,721	6,053	3,303	3,019	2,470	1,718
Supply - Land Mapping Program	8,768	5,634	2,647	3,057	3,780	1,204	6,738
One Year Demand	223	557	235	168	647	119	419

Sources: F/P Task Force Report (Greenspan Report); and CMHC Land and Infrastructure Mapping Program (1977)

Because of these theoretical and empirical inadequacies, the central conclusion that market power did not exist in these land markets, is not supported.

Table B3 is provided to illustrate the size of "top ten" land holdings around major urban regions during the late 1970s. This table should not be considered an assessment of the land supply, but rather, an illustrative listing of the holdings of some important members of the land development industry of that time.

The major firms often had significant land holdings in several urban regions, and the largest land holding belonged to the development arm of the Province of Ontario, the Ontario Land Corporation. As seen in the "Notes" column, some of the major firms from the 1970s are now amalgamated into other firms, a few have become defunct, and many are still major land developers in 2006.

Table B3: Summary of Major Residential Land Developers' Holdings, 1970s (reported in studies of 10 urban Regions)

Name of Firm	Land Holdings in Hectares (That were among the "Top 10" largest holding in an urban region)	Number of Urban Regions (in which the developers land was among the "Top 10")	Comments
Ontario Land Corporation	2,301.9	2	
BACM	1,599.3	3	Now Genstar
Carma Developers	1,468.2	4	
Markborough Properties	904.9	2	Now Ontario Municipal Employees Pension
Bramalea	867.2	2	Now defunct
Great Northern Capital	822.7	4	Now Genstar
Costain	735.3	3	
Nu-West	704.2	3	Now Ontario Municipal Employees Pension
Qualico	650.3	3	
Daon Development Corporation	554.8	3	Now Concert Properties, Bell Canada Enterprizes
Wimpey	537.0	3	Now Ontario Municipal Employees Pension
Abbey Glen Developments	504.6	3	Now Genstar
Cairns Homes	238.4	2	Later Nu-West, now Ontario Teachers Pension
Campeau Development Corp.	1,925.1		Now O & Y Properties
Cadillac Fairview	1,458.1		Now Ontario Teachers Pension Plan
Monarch Construction	228.6		
Melcor Development	211.7		
Subtotal	15,272.1		
101 Other "Top 10" Land Holders	31,464.4		

Notes: Table is summarized from Appendix C. The 10 urban regions are Halifax, Montreal, Ottawa, Toronto, Hamilton, Winnipeg, Saskatoon, Calgary, Edmonton, Vancouver.

Sources: F/P Task Force Report (Greenspan Report); and CMHC Land and Infrastructure Mapping Program (1977)

The Federal/Provincial Task Force's report was the last major land study of the 1970s. The market had changed, as the rapid increases in both low-density housing starts and urban lot prices had peaked in 1976. Accompanying the release of that report, the federal government announced the termination of the Municipal Infrastructure Program, which had been a bulwark of the urban land supply across Canada. Between 1961 and 1978 this program had provided more than $2. Billion to assist over 6,000 projects for trunk sanitary and storm sewers, treatment plants and trunk water mains in almost 1,500 municipalities covering at least 75 percent of the Canadian population.[158] The federal Municipal Incentive Grants program also ended, which had paid out $160 Million to support medium density, modest-cost housing,[159] and the federal government

[158] Among its major projects were: the York-Durham Sewage Scheme which opened up the development of the "second-tier" of the Greater Toronto Area, north of Highway #401; and the systems of treatment plants and interceptor sewers along the waterfronts of the Montréal Urban Community, urban Québec, Halifax-Dartmouth and St. John's which allowed these urban regions to stop dumping raw sewage into the ocean. CMHC Land and Infrastructure Division. Final Report of the Municipal Infrastructure Program (1961-1978), Ottawa:CMHC, 1979. pp. 22-23.

[159] This program was designed to encourage intensification and discourage sprawl. From 1975 to 1978 the federal government paid municipalities $1000 for each medium-density, modest cost housing start within

> *"…decided to stop funding new land assembly projects and to limit future funding to the continued development of the lands already held in partnership with the provinces*".[160]

These decisions indicate the Federal Provincial Task Force's report satisfied the policy needs of the time, and as well, the report provided considerable information about the land development industry.

The Later 1970s - Changes in the Land Development Industry and the Emergence of Land Supply Management

The late 1970s and early 1980s was a period of significant change in housing. As described above, this was the period when senior governments cut back land and urban programs.[161] Interest rates rose to unprecedented levels, housing starts fell back to 1960s volumes, land and house prices declined and defaults swelled, particularly of AHOP and ARP mortgage loans.[162]

The scope of the land operations of some major land developers in the early 1980s can be seen in Table B4, a summary of data provided by a Merrill Lynch Capital Markets. The seven firms in the Table were among the largest development corporations in Canada, with land assets between $100-900 Million. All of them reported steadily increasing land assets through the late 1970s and early 1980s, and an overall increase in land sales. With the exception of Melcor Developments,[163] land became a larger share of each firm's assets through the period, and then dropped back. Land operations were profitable, as profits exceeded 20% of sales in 20 of the 29 instances reported. Land sales were quite inconsistent from year to year, with each firm experiencing huge swings, probably peaking in some years because of sales of sites for multiple unit buildings and/or commercial properties.

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their jurisdiction. An assessment of the program is provided in Carey, Susan. Municipal Incentive Grant Program: An Analysis of Performance . (Ottawa:CMHC Corporate Planning Division), 1978.

[160] CMHC Annual Report – 1978, p.22.

[161] In 1978 the Ministry of State for Urban affairs was terminated. The next year, the federal Task Force on Canada Mortgage and Housing Corporation examined the implications of privatizing that corporation's activities, and proposed that CMHC discontinue its financial operations to focus on social/departmental policy. In the end, CMHC and public mortgage insurance were vindicated by their critics, but the same process was repeated five years later by the federal Neilsen Task Force on Program Review, with the same result. See Anderson, George. Housing Policy in Canada – Lecture Series. (Ottawa:CMHC), 1992. p. 39.

[162] A major increase in claims on CMHC's Mortgage Insurance Fund, largely by defaults on AHOP and ARP loans, began in 1977-78 and by 1980 the Fund was in deficit and had to borrow from the Government. Fees were increased, the economy improved and the deficit peaked near $800 Million in 1984. By 1986 the MIF resumed functioning without external support. Reported in CMHC, Corporate Profile. Ottawa: CMHC Research Report NHA 6065 10/68, pp. 74-93.

[163] Melcor's land was always at least one-half of total assets, and normally about three-quarters of assets, as this firm is primarily a land developer.

Table B4: Selected Financial Characteristics of Large Public Development Corporations, 1979-1986

1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Value of Land Assets, Holdings and Under Development (in $Millions)									
BCE Development		291.5	427.8	844.8	842.5	812.8	556.2	623.0	639.8
Bramalea Ltd		109.7	134.3	155.9	264.8	265.6	307.2	362.2	386.6
Cadillac Fairview		355.5	455.5	563.2	935.0				
Campeau Corporation				482.3	587.5	671.9	628.8	758.2	810.5
Coscan Inc.		121.9	133.1	258.0	285.9	253.7	247.1	266.5	221.8
HCI Holdings								63.0	65.9
Markborough Properties			156.3	247.4	247.5	283.7	273.2	380.2	455.4
Melcor Developments Ltd		58.5	69.2	105.1	99.3	84.9	80.5	100.5	104.5
Capitalized Interest in Land Assets (in $Millions)									
BCE Development				93.5	126.3	71.7	68.8	55.6	35.5
Bramalea Ltd			12.4	14.3	18.5	17.0	13.1	17.6	
Cadillac Fairview			44.5	62.5	113.4				41.3
Campeau Corporation				74.4	69.6	81.3	66.1	54.8	
Coscan Inc.			5.3	18.4	12.4	3.0	2.8	2.7	2.7
HCI Holdings								1.0	1.8
Melcor Developments Ltd		2.5	4.4	7.4	8.2	3.8	3.1	3.1	2.4
Land Sales (in $Millions)									
Cadillac Fairview									18.2
Coscan Inc.		48.2	41.5	64.9	24.3	89.3	82.5	53.5	94.0
HCI Holdings								37.3	51.1
Markborough Properties			57.4	39.0	98.0	74.7	120.8	253.9	121.0
Melcor Developments Ltd		35.4	28.0	13.9	29.7	25.4	17.1	29.2	28.6
Profit from Land Sales (as % of Sales)									
Cadillac Fairview									4%
Coscan Inc.		36%	23%	34%	9%	15%	14%	18%	21%
HCI Holdings								45%	51%
Markborough Properties			20%	30%	17%	19%	23%	26%	25%
Melcor Developments Ltd		43%	59%	56%	38%	34%	33%	26%	23%

Source: Merrill Lynch Capital Markets. The Canadian Real Estate Industry. Toronto: the firm, 1987

It is also notable in this table that the interest capitalized in land assets is a relatively small proportion of the total value of land assets, but it is a large number in relation to land profits. The tax treatment of capitalized interest was a significant issue for land developers through the period, and federal tax policy changed from allowing capitalized interest to be expensed.

Another change in the development industry in the later 1970s was its expansion into the United States. Canadian companies had grown to a size and a level of expertise that lead them to seek opportunities outside of the domestic market. As the Canadian market slowed, developers found the U.S. still provided opportunities for the large scale projects, and the larger Canadian developers had the market advantage in the U.S., of a record of performance with Canadian banks. At that time, Canadian banks were more national in character and more accustomed to operating from coast to coast, than most U.S. banks. A mini-survey in 1979 found six major Canadian developers with extensive U.S. operations had $1.5 Billion in U.S. assets, of their total of $5.5 Billion in assets. Remarkably, the total Canadian dollars invested to finance this U.S. investment

was a little over $100 Million, indicative of the leverage these sophisticated developers were able to command.[164]

The later 1970s saw the beginning of a wide-reaching change in the context for land development, as public authorities created tools to monitor and assess the urban land supply.[165]

The most extensive of these monitoring and assessment tools was CMHC's land mapping program. Table B5 is a summary of information extracted from six years of the reports from this program, from up to 28 metropolitan regions. It shows that, in the 65 region/year instances reported, the one-year land supply was more than twice the demand in 44 instances, and there were only 5 region/year instances when the supply was less than the demand. The amount of land developable within one year which was in the hands of the 5 largest owners, varied from relatively small to large amounts, and varied considerably from year to year. In almost every case, the supply of land 2-3 years from development exceeded demand, and did so by a higher ratio than that seen in the one-year supply. It is clear that by the end of the 1970s the urban residential land supply was strong in cities across Canada.

Many individual municipalities also put land management tools in place during this period. For example, by 1980 residential lot inventories had been created in Calgary, Edmonton and Regina[166], and broader land supply monitoring was carried on in Winnipeg, Kitchener, Peel Region and Ottawa. By the later 1990s the monitoring was extending from the suburban growth areas to the entire urban region. An example is the City of Regina's monitoring report, which contained separate quantifications of the land supply and absorption in three parts of metropolitan Regina – the outer parts of the Regina CMA; the subdivisions on Regina's urban fringe, and the in-fill activity within the built city.[167] These monitoring systems made it possible for municipal authorities to know how adequate their land supply process actually was, in quantitative terms, to precisely identify weaknesses, and to pinpoint where supply must be bolstered.

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[164] "Development in the United States … A Logical Route for Expansion", Proceedings of a Discussion at Canadian Institute of Public Real Estate Companies, February 6, 1979. p.6.

[165] An overall assessment of this situation was seen in DCH Consultants Inc. A Study of Land Supply Management Instruments in Canada. (Ottawa: CMHC Research Division), 1984.

[166] An analytical report recommending an ongoing land supply management program was produced for the Federation of Canadian Municipalities by the City of Regina in 1977, based on the city's lot inventory data. See Clark, R.S., The Supply of Residential Lots in Regina. (Regina:Report to the Federation of Canadian Municipalities, 1977)

[167] City of Regina Community Services Department. "Monitoring of Housing and Land Development – January to December, 1998", (Regina:the City), 1999.

Table B5: Selection of Land Supply Information from CMHC's Land and Infrastructure Mapping Program, Various Years[1]

Metropolitan Region	Ratio of Potential Land Supply to Residential Land Demand[2]						One-Year Land Supply Held by 5 Largest Private Owners (in ha.)	
	One Year			Two-Three Year				
	1977	1979	1982	1977	1979	1982	1979	1982
Victoria	0.6	0.4	0.3	2.9	2.0	0.3	44.6	
Vancouver	0.5	1.5	1.7	3.0	1.2	1.0	1098.0	589.4
Edmonton	2.0	2.5	2.8	5.4	1.8	3.6	1100.4	1037.4
Calgary	1.2	1.1	6.6	6.2	2.0	1.9	771.7	
Saskatoon	3.1	3.6	1.9	5.4	0.6	0.9	262.3	101.1
Regina		2.6	1.7		2.6	4.0	145.4	82.0
Winnipeg	1.1	2.1	3.9	4.9	1.4	4.5	643.0	891.3
Thunder Bay	3.1	1.3	2.2	16.6	5.4	9.7	37.1	55.9
Sudbury	4.2	10.6	33.2	5.1	6.2	31.3	266.2	262.7
Windsor	1.7	1.8	18.8	6.7	1.8	13.8	207.4	355.6
London	4.3	6.8	9.3	12.4	4.4	0.5	611.7	466.3
Kitchener	2.9	5.3		4.5	1.8		489.8	
St. Catharines	1.8	3.2		9.8	7.2		196.6	
Hamilton	3.3	4.1		10.4	4.9		775.3	
Missisauga		3.4			4.9		584.5	
Toronto	2.1	1.7		7.3	1.9		993.0	
Oshawa		3.7			4.2		359.4	
Ottawa	4.4	4.4	2.1	12.8	4.4	8.7	983.8	217.6
Hull		11.6	11.9		3.3	4.3	276.3	276.5
Montreal	9.4	4.8	4.3	34.6	4.1	3.6	1880.7	1882.4
Chicoutimi		3.4	2.1		2.4	9.1	98.1	67.0
Quebec		2.3	2.9		2.7	4.4	330.4	524.0
Fredericton		1.2	11.1		8.7	22.0		106.4
Saint John		14.2			20.8		272.0	
Moncton		38.2	23.0		19.8	72.1	46.0	363.5
Charlottetown			34.2			65.2		405.1
St. John's		1.1	1.3		8.9	6.6	17.2	63.0
Halifax	1.1	0.7	11.6	6.5	4.1	3.6	15.8	808.9

Notes:

1. CMHC operated the land mapping program in Branch Offices from 1977 to 1982. This table was extracted from three published reports containing some of the program's output, each entitled Land and Infrastructure Mapping Program Statistical Summary, dated 1977, 1979 and 1982 respectively.

2. Ratio produced by dividing the amount of land developable within one year by the estimation of demand for various types of housing in the same period, converted into land areas, and then summed

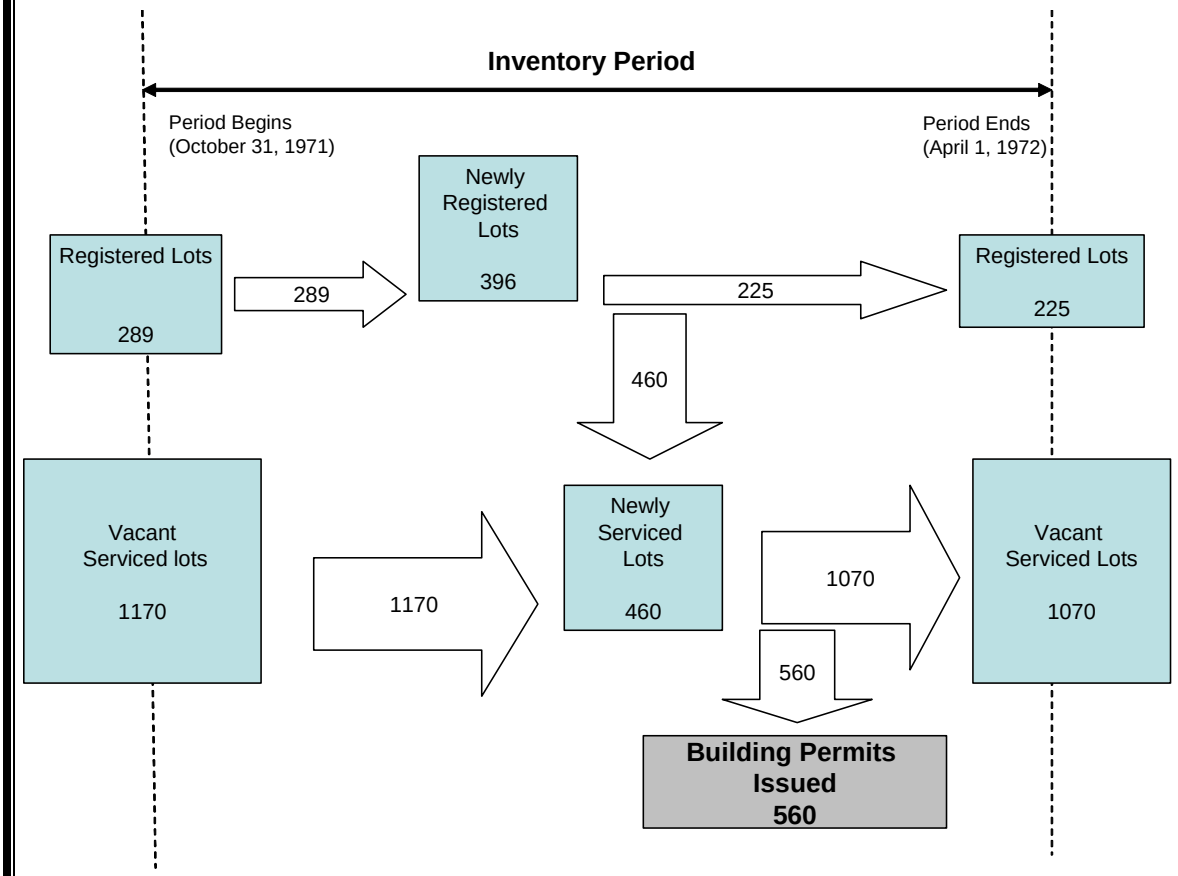
Source: CMHC Land and Infrastructure Mapping Program

In Edmonton, two research studies examined these capabilities. Richard Cook employed the City's land supply data as well as many other sources in a thorough investigation of the land development process and the industry in Edmonton during the housing boom period, 1971-1976.[168]

[168] See Cook, Richard. Lot Prices and the Land Development Industry in Edmonton, Canada, 1971-1976. Masters Thesis. Department of City and Regional Planning. (Berkeley: University of California, Berlkeley), 1977.

Ed Flood examined the land supply specifically, reviewing the City's lot inventory in an integrated study (lots registered, lots serviced and lots built up) covering the various sectors of the urban region.[169] He regrouped the City's quarterly data about lots for single-detached housing into 12 half-year periods from April 1970 to April 1976. Chart A-4 illustrates Flood's findings concerning the flows of lots between the stages in the supply process during a typical six months during that study period.

Chart B3: The Edmonton Lot Supply Process, 1970s



Source: This schematic was reproduced from Ed Flood's 1976 study, Mill Woods and the Edmonton Land Supply.

Although lot prices continually rose throughout the six years covered in Flood's research, he found there was a abundant supply of land in each stage of development, in each consecutive six-months within this study period.

[169] Flood, Ed. "Mill Woods and the Edmonton Land Supply" pp. 26-36 in Living Places Volume 12, No. 4, (Ottawa: CMHC, 1976).

Key Findings Concerning Land Development in the Flood Report
• the supply of registered lots approved for servicing in Edmonton was, on average, 69 percent more than the number of lots than were serviced, with a minimum oversupply of 30-60 percent in seven periods and a maximum oversupply of 75-200 percent in five periods. The planning approval process produced more lots than were used in the next stage of development, consistently, for these six years; • The supply of serviced lots exceeded the number of lots built up as singles by an average of 186 percent, with a minimum oversupply of 90-220 percent in nine periods and a maximum oversupply of 250-400 percent in three periods. There were far more registered, serviced lots ready to be built on, than were needed for construction, consistently, for these six years.

These findings contrast sharply with the conventional wisdoms that: planning was constricting the land supply; not enough land is being serviced to meet demand; and that increasing the supply of serviced lots will control the rise in land prices.

Flood also examined Mill Woods, the public land assembly project which came on stream in Edmonton during his study period. It began selling residential lots two years after it was purchased as raw land, and for the next four years (1972 to 1976) Mill Woods produced 32 percent of all lots for single-detached housing that were serviced in the Edmonton region. Mill Woods was servicing lots following their registration more quickly than competing private developers.

These analyses afforded by land supply monitors brought the understanding of land markets and supply issues to a new level. If there was a constant oversupply of lots at each stage of development, and a public land developer was consistently supplying one-fifth to one-third of the market, why did lot prices keep rising? Previous researchers had provided the explanation that new house prices, and their derivative lot prices, are created in the overall market for housing. The monitoring showed that simple supply-side measures will not insulate against rising prices in the market. It also showed that supply is more sophisticated that previous researchers had thought, as Flood found that individual builders buy groups of lots from developers and hold them in inventory for their continuing production of homes. When lots are being held in inventory by builders there can be, simultaneously, an oversupply of lots being produced, and an apparent shortage of lots available for sale.

Once municipalities were monitoring the land supply, the central issue in the land development literature of the 1970s, the supposed “shortage of serviced lots” which purportedly was “driving up housing prices” was no longer a sufficient analysis of the supply problem. The incomplete theoretical formulation of the problem had to give way to pragmatism, in the form of detailed land supply management systems. How much shortage? What is impeding the supply? What are the temporal dimensions of the shortage? Where is the problem, geographically? In order to be effective these questions had to be answered locally, and in real time. After demonstrating the capacity for land supply

monitoring across Canada, CMHC halted the program in 1983 and concentrated on the monitoring and assessment of housing markets.[170]

The slowing of demand for development, the cutbacks in government programs, the changes within the development industry and the emergence of land supply management capabilities all helped mark the end of the boom period for the residential land development industry. The period 1970 through 1977 had been a period of dramatic growth for the industry, and a period in which it was studied more extensively than it had been before, or than it has been since.

The 1980s and 1990s – An Era of Incremental Change

The next period in the evolution of the industry was studied by the foremost housing economist of the time, Dr. Frank Clayton, in his 1988 research monograph entitled The Housing Industry – Perspective and Prospective[171] This research milestone, a report with five working papers, included several chapters on land development. It described the emergence of the modern land development process as a procession of three eras following World War II.[172]

An overall finding concluded Dr. Clayton's discussion of the industry's evolution (focusing on Ottawa and Winnipeg):[173]

> *"…government actions, particularly those at the municipal level, combined with market forces are primary determinants of the structure of the residential land development industry. Through their imposition of large upfront financial and servicing requirements, lengthy land approval processes and restrictions on the amount and phasing of land permitted for development, municipalities promote large land development firms. Market conditions can reinforce these trends"*[174]

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[170] In all major markets, every three months CMHC provides the housing industry and consumers with the latest statistical information and analysis of housing trends so they can make informed decisions. Its Market Analysis Centre tracks information for local, provincial, regional and national markets, including information about land supply trends that it obtains from local lot inventories maintained by municipalities or in some cases, by private companies.

[171] Clayton Research Associates and Scanada Consultants. The Housing Industry – Perspective and Prospective, Summary Report - The Changing Housing Industry in Canada, 1946-2001. (Ottawa: CMHC, 1988).

[172] The information in the box is extracted from : Clayton Research Associates and Scanada Consultants. The Housing Industry -Perspective and Prospective, Working Paper One – The Evolution of the Housing Industry in Canada, 1946-86. and Working Paper Two – The Evolution of the Housing Production Process, 1946-86. (Ottawa: CMHC, 1989). pp.41-43, and pp. 62-23..

[173] Clayton's source for his examination of Ottawa was a 1979 M.A. Thesis at the Univeristy of Western Ontario by Harold Watson, entitled: The Residential Land Development Industry: Selected Case Studies of Concentration in Local Markets, 1970-1975. The examination of Winnipeg was based on Professor Bellan's 1977 investigation, Report and Recommendations of the Winnipeg Land Prices Inquiry Commission.

[174] Clayton Research Associates and Scanada Consultants. The Housing Industry – Perspective and Prospective, Working Paper One – The Evolution of the Housing Industry in Canada, 1946-86. (Ottawa: CMHC, 1989). p.55.

Key Findings Concerning Land Development in the Clayton Report

1946 to the Early 1950s Land development and servicing were mainly in the municipal domain. Municipalities were holding banks of land they acquired via tax-defaults in the Depression of the 1930s. Faced with the postwar demand for new housing, they installed services to these existing residential blocks, or to new subdivisions which were laid out by city planners. Land was subdivided as large rectangular lots, usually in a grid pattern, and these lots were almost all for single-detached houses. The municipalities sold the serviced lots to builders who constructed houses on them, and then sold the houses.

Early 1950s to the Early 1960s This was a period of transition, as municipalities began running out of land. They were also faced with costly extensions of sewer and water trunks and roads in order to open new land, and with raising taxes to pay for city growth. Builders were faced with having to buy raw land, secure approval to subdivide it, and provide services, in order to have enough serviced lots for their building operations. There was some experimentation with different subdivision layouts, curved street patterns and cul-de-sacs and irregular lot shapes.

Early 1960s to the Late 1980s Municipal and provincial governments substantially increased their involvement in land servicing and development, and particularly, in controlling the process of land development. The actual servicing of residential lots was shifted over to the developers, and developers had to pay special taxes and other levies to repay the costs of bringing trunk services to their sites.

- Increasing costs of servicing land, coupled with rapidly rising energy and transportation costs during the 1970s, caused a shift to developing more combined forms of housing such as semi-detached and row houses. These higher-density forms also introduced smaller lots, and as the 1970s and 1980s proceeded, the mix of housing forms began changing quite noticeably. Where land development in the late 1960s was 70 percent (or more) single-detached, by the late 1970s there were extremes of 40 percent single-detached and 60 per cent other housing forms. Through the 1980s the marketplace gradually moved back to the pre-dominance of singles in new developments, but a variety of lot sizes became the new norm.
- Research that showed: land markets in Toronto, Edmonton and Calgary involved large development firms and entailed some concentration. The Montréal market is characterized by small builder/developers; and land-holding patterns in Vancouver make this region less attractive to large firms.
- The evolution of three builder-owned co-operative residential land development companies was discussed (Carma in Calgary, Ladco in Winnipeg and Buildevco in Kitchener). Each co-operative was formed in the 1950s by builders banding together to assure themselves an adequate land supply. While each co-operative was a tremendous success as a land developer, they *"…did not have long-term survival rates as co-operative land ventures. The short-term time horizons of the builder members appeared to be a major factor contributing to the lack of success…* ".
- The land development industry has high frontend costs (land acquisition, holding and planning) and is highly leveraged, and therefore it is highly susceptible to fluctuations in interest rates. It is also vulnerable to shifts in the demand for land, and this is also quite sensitive to changing interest rates. Land development entails considerable uncertainty, as it requires a lengthy process for developers to find out how much of their land can be developed and what markets it will be allowed to compete in.

Notwithstanding these challenges, Clayton reported research establishing that representative developers' profits were extremely high in the 1970s, then declined to the 20% range or lower in the 1980s.

The context for land development evolved through the later 1980s and early 1990s. Although the demand for land had declined, the stock of serviced land carried in from the 1970s was dwindling. In St. John's, Halifax, Ottawa and Winnipeg the Stage One lands were becoming scarce in Official or Master Plans (sometimes known as Community or Growth Plans). Agricultural land was coming under increased pressure in Québec, Ontario and British Columbia, as development was beginning to reach the inner edges of the agricultural zones established in the 1970s. Transportation improvements like the Ottawa transitway, improvements to Toronto and Montreal's urban expressways, and opening of the LRTs in Calgary, Edmonton and Vancouver all refocussed growth in sectors of the urban periphery. A need was emerging for a new, expensive cycle of planning for and construction of, new sewerage and water treatment and transmission facilities. Also, existing infrastructure required considerable rehabilitation.

This situation was summarized in a paper presented by CMHC to the 1986 Conference of the Canadian Home Builders' Association:

> *"…In a situation characterized by shrinking stocks of development land, huge costs in the creation of additional supply, competing pressure for public spending on existing services, spotty demand, and accurate monitoring systems in place, managers in the public sector and the development industry can be expected to create a steady, incrementalist approach to the construction of new infrastructure and the opening of new development areas. If the 1960s and 1970s can be described as years of "boom and bust" in development, and "crisis management" in infrastructure planning, there is strong potential for describing the 1990s as an era of growth through cooperative planning."*[175]

As the context for land development evolved, the impact on the developer's bottom line was observed by business professor and former developer James McKellar in his 1995 overview of the Canadian housing system:

> *"…profits in land development peaked in the 1970s (as high as 40 percent for some firms), fell below 10 percent during the recession of the early 1980s, and then climbed again during the remainder of the 1980s. The effects of the recession of the 1990s have been particularly harsh on land developers, who have had to carry their costs for land, approvals, capital, and infrastructure during a long period over which revenues have substantially declined."*[176]

The magnitude of the change was also described by the Pacific Chapter of the Urban Development Institute in its 1998 report entitled State of the Real Estate Development Industry. UDI-Pacific reported its residential members' business had declined by 13 percent in 1997, and had dropped another 26 percent during the first three-quarters of 1998.[177]

A topic that grew in importance through the 1990s was Development Cost Charges (DCCs). These are fees collected from land developers and builders by municipalities to finance new external infrastructure for the developers' subdivision. Issues concerning DCCs are often raised by the industry across Canada because of inequities in the way the fees are applied, including:

- the infrastructure covered by DCCs varies, and some items included (or excluded) are controversial;
- methods of calculating DCCs vary (different DCCs for different types or sizes of units, or on an acreage or front foot basis);
- the level of the DCCs often varies among municipalities in a single urban region, and varies between urban regions;
- The cost of the DCCs is often high, sometimes exceeding the costs of the subdivision services installed by the developer.

Studies of various aspects of DCCs have been undertaken by local industry organizations, cities, provincial governments and CMHC, but there has been little

[175] CMHC, Housing Issues in the 1980s and 1990s: Factors Which Will Affect Structural Adjustments in the Residential Construction Industry, (Ottawa: CMHC) 1986. pp.19-21.
[176] McKellar, James. The Canadian Housing System in the 1990s. (Ottawa:CMHC) 1995. pp. 36-38.
[177] UDI Pacific Region. State of the Real Estate Development Industry. (Vancouver: UDI), November 1998.

rationalization of these many variables.[178] DCCs have risen sharply, particularly in British Columbia, as municipalities struggled to provide the infrastructure for new growth in the wake of provincial governments' offloading of these responsibilities. As one CMHC study observed:

> *"A number of municipalities and urban planners are starting to reassess the application of DCCs, not only from the perspective of their impact on urban form … …but also as a revenue generator. Whether DCCs continue to play the role they did in the last decade, or whether alternate sources or means of funding urban infrastructure will emerge, it will have implications for the housing industry in its ability to produce homes priced for consumers in their respective markets."*[179]

Like property taxes, DCCs contribute to directing urban growth, but it appears that the administrations which impose them are not paying enough attention to their vital, and perhaps costly, impact on urban form.

The period saw the sophistication of planning for the future land supply continuing to increase. One illustration is from Winnipeg, where for 30-40 years planners have deliberately maintained a short and long term land supply in four quadrants of the region to foster competition. While the market for detached housing was shared equally between the quadrants in the 1980s, buyer preferences have gradually shifted so the market share in the two southern quadrants is now over 80 percent. Current land supply planning studies cover short and long term land supply and demand in all quadrants, as well as unserviced lots and block land in the vacant land inventory.[180] Another illustration is the land supply analysis being undertaken in the Greater Toronto Area, including Hamilton, to accommodate 2.3 Million new residents over 3 decades, within the territory of six regional governments.[181] By considering such a huge market and time frame, the analysts seek to focus on whether the needed supply can be produced increasing intensification, or whether a major new expansion of greenfields development will be required. In a parallel assessment, the Province

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[178] Some recent examples are: IBI. Uses of Development Cost Charges. (Ottawa:CMHC) 2005; BC Ministry of Community Services, Development Cost Charge – Best Practices Guide. (Victoria:MCS) 2005; Andrejs Skaburskis and Ray Tomalty. "The Effects of Property Taxes and Development Costs Charges on Urban Development: Perspectives of Planners, Developers and Finance Officers in Toronto and Ottawa," pp303-325 in Canadian Journal of Regional Science XXIII:2 (Summer 2000); Energy Pathways and UDI-Pacific. Levying DCCs on a Square-Foot Basis. (Ottawa: FCM, CHBA, CHRA and CMHC), 1997; Andrejs Skaburskis, The Use of Property Taxes and Development Cost Charges to Modify the Environmental Consequences of Urban Growth. (Kingston: Queens University SURP) 1997; UDI-Pacific, Discussion Paper on Development Cost Charges and Levies. (Vancouver: UDI-Pacific) 1990.

[179] Urban Aspects Consulting Group & Langlais et Associés, The Housing Construction Industry: Challenges and Opportunities for the 21st Century, (Ottawa: CMHC), June 2002, p.6.

[180] City of Winnipeg. Residential Land Supply Study. (Winnipeg: the City) October 2004, and ND Lea Engineers and Planners. Waverley West Plan Winnipeg Amendment – Housing and Population Report. (Winnipeg: ND Lea), January 2004.

[181] See Malone Given Parsons. Analysis of the Land Supply in the GTA-Hamilton Area. (Toronto:UDI-Ontario) July, 2004.

of Ontario is considering the plans for land supply by all governments in a huge arc above Lakes Ontario and Erie, termed "The Greater Golden Horseshoe".[182]

The overall state of land development in the late 1990s was described in CMHC's broad study of the housing industry, based on Statcan data and interviews with 60 stakeholders.[183] Like McKellar and UDI-Pacific, this study found developers' gross revenue and profits declined through the decade.[184] The study noted that it is difficult to conduct a comprehensive analysis of the housing industry, partly because of the preponderance of very small firms which enter and exit it, and partly because available data sources are inadequate.

> *"For example, there is no reliable estimate of the number of firms in the industry by number of employees … ... Nor are thorough analyses of profitability available for unincorporated firms, which are very common in the industry… … An inability to understand the operation of the industry because of data availability problems means that it is very difficult to identify and address problems, from both an industry and a government perspective. Discussions and policies are based on anecdotal evidence, which is less reliable than credible data".*[185]

As discussed in Chapter 2 and Appendix C, there has been no improvement in the Statistics Canada/Industry Canada methods of obtaining data concerning the land development industry since these observations were published in 2002.

Summary – Residential Land Development in the Past

The story of land development since World War II is the history of the emergence of a huge industry that has become central to the continuing urbanization of Canada. From its beginnings as an unorganized adjunct to housing in the wake of the war, by the 1970s the industry was producing record volumes of sites for the construction of 250,000 housing units per year. The booming land markets and soaring prices of the 1970s drew attention to land development, some problems were identified, and a series of research reports explored the development industry and considered the various problems. In the later 1970s interest rates spiked upwards, housing and land markets calmed for nearly a decade, and governments withdrew from programs closely associated with the land supply. The large land developers who were seen as problematic for their domination of the markets in the 1970s became less visible, and many expanded into the growth markets of the USA, while some evolved into even larger firms. The initial research of the 1970s gave way to more methodical programs of monitoring and managing the land supply, and the land development industry adjusted to periods of decline and resurgence in markets. Land development

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[182] Ontario Growth Secretariat. A Current Assessment of the Gross Land Supply in the Greater Golden Horseshoe. (Toronto:Ministry of Public Infrastructure Renewal), Winter 2005.
[183] Urban Aspects Consulting Group & Langlais et Associés, The Housing Construction Industry: Challenges and Opportunities for the 21st Century, (Ottawa: CMHC), June 2002.
[184] Average gross revenues declined from $509,600 in 1993 to $473,800 in 1997, while average profits fell from a modest $1400 gain to a $5500 loss. The Housing Construction Industry, Table 7, p.12.
[185] Housing Construction Industry. p.85.

within the built city emerged as an important new theme through the 1980s and 1990s, and a literature grew to transfer knowledge about technological and other aspects of urban intensification.